

APPENDIX 5 – EPPENDORF PIPETTES				Page 1 of 1	
Division of Forensic Science  TRACE EVIDENCE PROCEDURES MANUAL				Amendment Designator:	
				Effective Date: 31-March-2003	
5 EPPENDORF PIPETTES					
A.	The Trace Evidence Section has a number of fixed volume Eppendorf pipettes that are not used for critical measurements in analytical work. These pipettes do not require a calibration check of the accuracy and precision of the volume that they dispense.				
B.	The variable Eppendorf pipettes are used in preparing standards and samples for analysis by ion chromatography (IC). Any of these solutions or dilutions is meant to only be comparative in nature on a semi-quantitative basis.				
a. Annually – Check the performance and calibration of the Eppendorf variable pipettes using the Forensic Biology Section’s Artel PCS 2™ Pipette Calibration System with assistance from that Section’s personnel. Record the QC data on the Eppendorf Pipette QC Log Sheet (Appendix 19). If the pipette is out of calibration, then perform the calibration check again. If the pipette is still out of calibration, then the pipette will not be used at that particular volume. If the pipette is out of calibration at more than one volume, then the pipette will be sent to the manufacturer for repair. Repair and/or maintenance will be recorded in a log maintained for the pipettes.					
i. Data from the Eppendorf Series 2000 Instruction Manual is used to determine the allowable range of the calibration check. This is as follows:					
	Model	Button color	Volume Increment	Volume	%Inaccuracy %CV
	10-100	Yellow	0.1 µL	10 µL	± 2.5% ≤ 2.5%
				50 µL	± 2.5% ≤ 2.5%
				100 µL	± 2.5% ≤ 2.5%
	100-1000	Blue	1.0 µL	100 µL	± 5.0% ≤ 5.0%
				500 µL	± 5.0% ≤ 5.0%
				1000 µL	± 5.0 % ≤ 5.0%
b. As Needed – If an Eppendorf variable pipette has been dropped or otherwise damaged, the pipette will be checked using the Forensic Biology Section’s Artel PCS 2™ Pipette Calibration System with assistance from that Section’s personnel. If the pipette is out of calibration the pipette will be sent to the manufacturer for repair. Repair and/or maintenance will be recorded in a log maintained for the pipettes.					
◆End					